

The Commonwealth Forestry Review



Vol. 54, 1975

PUBLISHED BY
THE COMMONWEALTH FORESTRY ASSOCIATION
11 KEBLE ROAD, OXFORD

Price to Non-Members £6.60 net

THE COMMONWEALTH FORESTRY ASSOCIATION

Incorporated by Royal Charter November 1921, and by Supplemental Royal Charter, 1962
11 KEBLE ROAD, OXFORD

Patron:

HER MAJESTY THE QUEEN

President:

SIR STUART S. MALLINSON, C.B.E., D.S.O., M.C., D.L.

Vice-Presidents:

SIR HARRY CHAMPION, C.I.E.

E. BRYAN LATHAM, C.B.E., M.M.

SIR ARTHUR GOSLING, K.B.E., C.B.

J. A. DICKSON, C.B.

Past Chairman:

1921-22. THE RT. HON. VISCOUNT NOVAR, K.T., G.C.M.G., P.C.

1923-24. COLONEL THE RT. HON. LORD COURTHOPE, M.C., P.C.

1924-27. SIR JOHN STIRLING MAXWELL, Bt., K.T.

1927-32. SIR P. H. CLUTTERBUCK, C.I.E., C.B.E., V.D.

1933-34. SIR JOHN STIRLING MAXWELL, Bt., K.T.

1934-37. THE RT. HON. VISCOUNT STONEHAVEN, G.C.M.G., D.S.O., P.C.

1938-54. THE RT. HON. THE EARL OF CLARENDON, K.G., G.C.M.G., G.C.V.O., P.C.

1954-59. THE RT. HON. LORD MILVERTON, G.C.M.G.

1959-61. SIR HARRY CHAMPION, C.I.E.

1961-64. E. BRYAN LATHAM, C.B.E., M.M.

1964-72. SIR ARTHUR GOSLING, K.B.E., C.B.

1972-75. J. A. DICKSON, C.B.

Chairman:

C. G. A. LATHAM

Vice-Chairman:

J. WYATT-SMITH

Hon. Treasurer:

P. J. WOOD

Governing Council:

P. G. BEAK, M.B.E. (Britain)

J. D. BRAZIER (Britain)

SIR HARRY CHAMPION, C.I.E. (Britain)

M. J. CONWAY (New Zealand)

DR. D. A. N. CROMER (Australia)

S. DARDAINE (Trinidad)

DR. H. C. DAWKINS, M.B.E. (Britain)

J. A. DICKSON, C.B. (Britain)

F. C. FORD ROBERTSON, O.B.E. (Britain)

J. H. FRANCOIS (Ghana)

SIR A.H. GOSLING, K.B.E., C.B. (Britain)

R. E. GROVES (Britain)

A. HAMID (Bangladesh)

V. M. HEALY (Australia)

G. D. HOLMES (Britain)

J. R. JOHNSTON (Britain)

K. L. LAHIRI (India)

A. F. A. LAMB, O.B.E. (Britain)

E. BRYAN LATHAM, C.B.E., M.M. (Britain)

C. G. A. LATHAM (Britain)

J. SCOTT MCBRIDE (Britain)

D. L. MCNEIL (Britain)

SIR STUART S. MALLINSON, C.B.E.,
D.S.O., M.C., D.L. (Britain)

C. S. MMBANDO (Tanzania)

O. M. MBURU (Kenya)

DR. F. R. MOULDS (Australia)

A. M. OSENI (Nigeria)

R. W. V. PALMER, O.B.E. (Britain)

DR. D. R. REDMOND, D.F.C. (Canada)

S. D. RICHARDSON (Britain)

M. L. S. B. RUKUBA (Uganda)

R. G. SANGSTER, C.B.E. (Britain)

C. D. SCHULTZ (Canada)

DUNCAN STEVENSON, O.B.E. (Britain)

K. W. TRENAMAN, O.B.E. (Soloman Is.)

E. J. WARD (Canada)

G. WEBSTER, O.B.E. (Britain)

P. J. WOOD (Britain)

J. WYATT-SMITH (Britain)

EDITORIAL COMMITTEE

Dr. H. C. DAWKINS, M.B.E., M.A., (*Commonwealth Forestry Institute*)

P.J. WOOD, M.A. (*Commonwealth Forestry Institute*)

J. D. BRAZIER (*Princes Risborough Laboratory*)

C. J. W. PITT, B.SC., M.A., M.I. for (*Editor and Secretary*)

COMMONWEALTH FORESTRY REVIEW

INDEX TO VOLUME 54, 1975

| | <i>Page</i> |
|--|---------------|
| AROUND THE COMMONWEALTH | |
| Canada | 12 |
| Cyprus | 105 |
| Fiji | 201 |
| Ghana | 106 |
| India | 202 |
| Malta | 21 |
| New Zealand | 108, 202, 203 |
| United Kingdom | 22, 107, 203 |
| ARTICLES—Titles | |
| Agri-Silvicultural system in Nigeria, by O.O. Olawoye | 229 |
| Comparison between point sampling and plot sampling in tropical rain forest based on a concept of the equivalent relascope plot size, by S. G. Banyard | 312 |
| Direct volume estimations on aerial photographs of different scales in the dry deciduous forests of Central India, by S. C. Joshi and E. van Es | 241 |
| Fiji Pine Scheme: impressions of a visiting Canadian, by R. F. Sutton | 250 |
| Forest Resources of the USSR, their exploitation and their potential, by W. R. J. Sutton | 110 |
| Forestry in Brazil, by R. W. Fishwick | 53, 189 |
| History of the Timber Trade Federation 1829–1973 by E. B. Latham | 216 |
| Information system for plantation management, by J. B. Dargavel, I. C. Thorn, D. R. Cowen, R. Lindsay & E. Challenger | 27 |
| Irrigated plantation project in Abu Dhabi, by P. J. Wood, A. F. Willens and G. A. Willens | 139 |
| Logging contractors and timber utilization in Ghana, by J. C. Chryssides | 237 |
| Major trends and issues in forestry education in Africa, a view from Ibadan, by L. Roche | 166 |
| Making trees serve people, by Jack C. Westoby | 206 |
| Measuring tree heights in dense stands with sectional poles and a horizontal arm, by W. O. Binns and R. E. Strickland | 257 |
| Pathology of more forest tree species in West Malaysia, by H. M. Ivory | 64 |
| Pathology of <i>Pinus</i> spp. in Western Malaysia, by H. M. Ivory | 154 |
| Possibilities of increased consumption of the lesser known tropical hardwood species, by R. W. Towler | 243 |
| Preserving forest-tree germ plasm, by J. C. Barber and S. L. Krugman | 266 |
| Proposals for tree species trials in Ethiopia, by J. A. D. Jackson | 82 |
| Report on some IUFRO tropical forestry meetings in 1975, by P. J. Wood | 310 |

| | Page |
|--|------|
| Review of forest inventory in Burma, 1963-72, by Myint-Tin, Than-Myint, Shwe Kyaw, Pe Thein and Kyaw Tint | 305 |
| Sources of error in Biltmore stick type instruments, by W. Finlayson and Z. Těchanou | 290 |
| Studies of growth and maturity of bamboo culms, by S. H. Hasan | 147 |
| Timber in marine and freshwater construction, by W. H. Brown | 54 |
| Towards more reasonable objectives in tropical high forest management for timber production, by J. R. Palmer | 273 |
| Trials of ULV applications of herbicides in British Forestry, by R. M. Brown and J. M. Thomson | 38 |
| Two rotations of <i>Pinus patula</i> in the Usutu Forest, Swaziland, by Julian Evans | 69 |
| Utilization of forest and sawmill residues, by A. Krilov and G. E. Ironside | 296 |

AUTHORS

| | |
|--|---------|
| BANYARD, S. G., Comparison between point sampling and plot sampling in tropical rain forest based on a concept of the equivalent relascope plot size | 312 |
| BARBER, J. C. and KRUGMAN, S. L. Preserving forest tree germ plasm | 266 |
| BINNS, W. O. and STRICKLAND, R. E. Measuring tree heights in dense stands with sectional poles and horizontal arm | 257 |
| BROWN, R. M. and THOMSON, J. H. Trials of ULV applications of herbicides in British Forests | 38 |
| BROWN, W. H., Timber in marine and freshwater construction | 45 |
| CHALLINGER, E., DARGAVEL, J. B., THORN, L. G., COWEN, D. R. and LINDSAY, R. An information system for plantation management | 27 |
| CHRYSSIDES, J. C., Logging contractors and timber utilization in Ghana | 237 |
| COWEN, D. R., CHALLINGER, E., DARGAVEL, J. B., THORN, L. G. and LINDSAY, R., An Information system for plantation management | 27 |
| DARGAVEL, J. B., CHALLINGER, E., THORN, L. G., COWEN, D. R., and LINDSAY, R., An Information system for plantation management | 27 |
| EVANS, JULIAN, Two rotations of <i>Pinus patula</i> in the Usutu Forests, Swaziland | 69 |
| FINLAYSON, W., and TCHANOU Z., Sources of error in Biltmore stick type instruments | 290 |
| FISHWICK, R. W., Forestry in Brazil | 53, 189 |
| HASAN, A. H., Studies of growth and maturity of bamboo culms | 147 |
| IRONSIDE, G. E. and KRILOV, A., Utilization of forest and sawmill residues | 296 |
| IVORY, M. H., The pathology of more forest tree species in West Malaysia | 64 |
| IVORY, M. H., The pathology of <i>Pinus</i> spp. in West Malaysia | 154 |
| JACKSON, J. A. D., Proposals for tree species trials in Ethiopia | 82 |
| JOSHI, S. C. and E. VAN ES, Direct volume estimations on aerial photographs of different scales in the dry deciduous forests of Central India | 241 |
| KRILOV, A. and IRONSIDE, G. E., Utilization of the forest and sawmill residues | 296 |
| KRUGMAN, S. L. and BARBER, J. C., Preserving forest-tree germ plasm | 266 |
| KYAW-TINT, MYINT-TIN, THAN MYINT, SHWE KYAW, PE THEIN, A Review of forest inventory in Burma, 1963-72 | 305 |
| LATHAM, E. B., The history of the Timber Trade Federation, 1829-1973 | 216 |
| LINDSAY, R., DARGAVEL, J. B., THORN, L. G., COWEN, D. R. and CHALLINGER, E., An information system for plantation management | 27 |
| MYINT-TIN, THAN MYINT, SHWE KYAW, PE THEIN and KYAW TINT, A review of forest inventory in Burma, 1963-72 | 305 |
| OLAWOYE, O. O., The Agri-sivicultural system in Nigeria | 229 |

| | <i>Page</i> |
|---|-------------|
| PALMER, J. R., Towards more reasonable objectives in tropical high forest management for timber production | 273 |
| PE THEIN, MYINT-TIN, THAN MYINT, SHWE KYAW and KYAW TINT, A Review of forest inventory in Burma 1963-72 | 305 |
| ROCHE, L., Major trends and issues in forest education in Africa, a view from Ibadan | 166 |
| SHWE KYAW, MYINT-TIN, THAN MYINT, PE THEIN and KYAW-TINT, A Review of forest inventory in Burma, 1963-72 | 305 |
| STRICKLAND, R. E., and BINNS, W. O., Measuring tree heights in dense stands with sectional poles and a horizontal arm | 257 |
| SUTTON, R. F., The Fiji pine Scheme: impressions of a visiting Canadian | 250 |
| SUTTON, W. R. J., The forest resources of the USSR, their exploitation and their potential | 110 |
| THAN MYINT, MYINT-TIN, SHWE KYAW, PE THEIN and KYAW-TINT, A Review of forest inventory in Burma, 1963-72 | 305 |
| THOMSON, J. H., and BROWN, R. M., Trials of ULV applications of herbicides in British Forestry | 38 |
| THORN, L. G., DARGAVEL, J. B., COWEN, D. R., LINDSAY, R. and CHALLINGER, E., An information system for plantation management | 27 |
| TCHANOU, Z. and FINLAYSON, W., Sources of error in Biltmore stick type instruments | 290 |
| TOWLER, R. W., The possibilities of increased consumption of the lesser known tropical hardwood species | 243 |
| VAN ES, E. and JOSHI, S. C., Direct volume estimations on aerial photographs of different scales in the dry deciduous forest of Central India | 241 |
| WESTOBY, J. C., Making trees serve people | 206 |
| WILLENS, A. F., WOOD, P. J., and WILLENS, G. A., An irrigated plantation project in Abu Dhabi | 139 |
| WILLENS, G. A., WILLENS, A. F. and WOOD, P. J., An irrigated plantation project in Abu Dhabi | 139 |
| WOOD, P. J., WILLENS, A. F., and WILLENS, G. A., An irrigated plantation project in Abu Dhabi | 139 |
| WOOD, P. J., A Report on some IUFRO tropical forestry meetings in 1975 | 310 |

SPECIES

| | |
|---------------------|-----|
| Bamboo | 147 |
| <i>Pinus patula</i> | 69 |
| <i>Pinus</i> spp. | 154 |

TERRITORIES

| | |
|---------------|---------|
| Abu Dhabi | 139 |
| Africa | 166 |
| Brazil | 53, 189 |
| Burma | 305 |
| Ethiopia | 82 |
| Fiji | 250 |
| Ghana | 237 |
| India | 241 |
| Nigeria | 229 |
| Swaziland | 69 |
| USSR | 110 |
| West Malaysia | 64, 154 |

BIOGRAPHIES

| | |
|----------------|---|
| Brasnett N. V. | 1 |
|----------------|---|

| | |
|--|-------------|
| | <i>Page</i> |
| CORRESPONDENCE | 25 |
| EDITORIALS | 4, 185 |
| MISCELLANEOUS | |
| 53rd Annual General Meeting, | 198 |
| Tenth Commonwealth Forestry Conference | 24 |
| Visit to TRADA | 200 |
| NEW MEMBERS | 26, 99, 205 |
| NOTES AND COMMENTS | |
| Applying Wood Preservatives | 6 |
| Commonwealth Forestry Handbook | 11 |
| Apology 1974 | 11 |
| Errata | 99 |
| Conference on Forestry Management | 195 |
| Development of Amazon Forests | 192 |
| Dutch Elm Disease | 5, 204 |
| Eighth World Forestry Conference, 1978 | 193 |
| Errata | 189 |
| FAO Brazil Conference on tropical moist forest | 193 |
| FAO Publications | 192 |
| Forestry Commission News | 5 |
| Dutch Elm Disease | 5 |
| New Headquarters | 187 |
| Northern Research Station | 188 |
| Regional Advisory Committees | 5 |
| Role of Forestry Commission | 187 |
| Tourist Accommodation | 188 |
| Higher Education in New Zealand | 10 |
| High Wycombe College of Technology | 7, 97 |
| IUFRO Workshop, Nigeria/Ghana 1975 | 10 |
| Missing Members | 11, 100 |
| Modernisation of sawmilling | 95 |
| New Director, Nature Conservancy | 7 |
| New Herbicide | 98 |
| News of Members | 6, 99, 191 |
| New Year's Honours | 187 |
| New Zealand Appointments | 10 |
| New Zealand to assist forestry in Peru | 191 |
| Pine Forests in East Africa | 10 |
| Princes Risborough News | 6 |
| Flame Retardants | 6 |
| Stress Grading Rules for Europe | 6 |
| Records from New Zealand | 10 |
| Restoring an ancient door | 10 |
| Sharp Rise in world wood based panel production capacity | 95 |
| Sir Stuart Mallinson Gold Medal | 190 |
| Standing Committee on Commonwealth Forestry | 192 |
| Subscriptions | 100, 195 |
| Timber designs for farm building | 97 |
| Timber Drying | 191 |
| Prefabricated units | 191 |
| Solar driers | 191 |

| | <i>Page</i> |
|-------------------------|-------------|
| TRADA Appointment | 7 |
| UNESCO Programme "MAB" | 194 |
| Vacancy at UCNW, Bangor | 195 |

OBITUARIES

| | |
|------------------------|-----|
| Attwood L. | 196 |
| Browne R. S., O. B. E. | 196 |
| Cameron D. Roy | 196 |
| March E. W. | 183 |
| Parker Dr. A. K. | 197 |
| Smythies E. A. | 101 |
| Strugnell E. J. | 103 |

REVIEWS—Books and Publications

| | |
|---|-----|
| Beziehung zwischen Vegetation und Boden (Die Vegetation Ungarischer Landschaften 6)—Relations between vegetation and soils (The vegetation of Hungarian landscapes 6) | 321 |
| Dendrologie der Nadelbäume und übrigen Gymnospermen—Dendrology of needle-leaved trees and other gymnosperms | 323 |
| East African Vegetation | 92 |
| Economist Measurement Guide and Reckoner | 323 |
| Epping Forest, its history and wildlife | 176 |
| Eucalypts of the Western Australian goldfields | 324 |
| Forest and Man | 92 |
| Forest Products in terms of metric units | 177 |
| Guide to home-grown timber prices and forestry costings 1975 | 323 |
| Logging and log transport in tropical high forest | 322 |
| Observer's Book of Trees | 325 |
| Pine forests of the Bahamas | 321 |
| Population dynamics of forest stands | 176 |
| Training the young forest worker | 92 |
| Waldschutz und Umwelt—Forest protection and environment | 323 |

Annual Reports

| | |
|--|-----|
| Economic Survey of Private Forestry—Establishment Costs—England and Wales 1973 | 325 |
| Economic Survey of Private Forestry—Income and Expenditure—England and Wales | 325 |
| Economic Survey of Private Forestry (for Scotland) 1972 | 326 |
| Forestry Commission of Great Britain 1973–74 | 178 |
| Forestry Commission of Great Britain—Report on Forest Research | 93 |
| Forest Insect and Disease Survey, Canada 1973 | 177 |
| Queensland Department of Forestry 1973–74 | 328 |
| Rhodesia Forestry Commission 1972–73 | 179 |
| South Australia Woods and Forests Department 1971–72, 1972–73 | 179 |
| Swaziland: Census of Commercial Timber Plantations and Wood and Wood Products 1973 | 330 |
| Trinidad and Tobago Forestry Division 1972 | 180 |
| Western Australia Forests Department 1973–74 | 327 |

